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IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).(71) Applicant (for all designated States except US): ARIZONA BOARD OF REGENTS [US/US]; Box 873511,
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(54) Title: THREE-DIMENSIONAL DIGITAL LIBRARY SYSTEM

(57) **Abstract:** A computer system (100) and method for the storage, archiving, query and retrieval of information relating to 3D objects is provided. The system includes data acquisition (130) means for requiring point coordinate data about a three-dimensional object, a database component (105), a processor (103) and a user interface (110). The processor (103) is operable to generate modeled data (105) from the point coordinate data and to segment the modeled data (124) into feature data (122) representing a plurality of features of the object (118). The data is organized so that features of the 3D objects can be automatically extracted for online query and retrieval. The processor (103) is operable to store the modeled data (124) and the feature data (122) in the database component (105) and retrieve modeled data (124) and feature data (122) from the database component (105) using search criteria representing object features of interest. The user interface (110) is operative with the processor (103) to allow a user input search criteria to processor (103) and to display data retrieved by the processor as a representation of an object feature.